

REMARKS

Claims 1-33 are now pending in the application. Claims 1-11 and 13-30 stand rejected. Claim 12 is objected to. Claims 31-33 are new. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-10, 13-19, 21, 25, 27, 28 and 30 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Jayanth et al. (U.S. Pat. No. 6,758,051). This rejection is respectfully traversed. Claims 1-9, 13-18, 25, 27, 28 and 30 stand rejected alternatively under 35 U.S.C. § 102(b) as being anticipated by Saunders et al. (U.S. Pat. No. 4,307,775). This rejection also is respectfully traversed.

Referring to independent claims 1, 3, 4, 5, 14, 21, 25 and 27, Jayanth et al. disclose a compressor diagnostic system 100 for a cooling system. The diagnostic system 100 monitors the status of a motor protector 54 of a compressor 10 (Abstract; FIG. 1-3; col. 6, lines 7-15). Logic circuitry 104 may be located in a convenient position with respect to the compressor 10 or may be integrated into a contactor, wiring harness or molded plug (FIG. 2-3; col. 5, lines 32-43). A thermostat 350 provides one of a plurality of inputs to the diagnostic system logic circuitry 104 (FIG. 2, 3, 8-10; col. 10, lines 32-59). However, the thermostat 350 does not receive or respond to signals from the logic circuitry 104. Further, the thermostat 350 does not receive or respond to any signals representative of the operation of the compressor 10.

Referring again to independent claims 1, 3, 4, 5, 14, 21, 25 and 27, Saunders et al. describe a control means in which a thermostat 12 or 13 is used as an indicator

means (col. 3, lines 30-36). A unit controller 10 includes a microcomputer 15 that monitors and controls a compressor and other devices via a current transformer 14 and relay driver panel 11 (FIG. 1). The microcomputer 15 can send a signal indicative of a device failure to the thermostat 12 or 13. The thermostat 12 can flash a signal, and the thermostat 13 can display a code, indicating such failure (col. 6, line 30-col. 7, line 11). A user may use a keyboard 114 of the thermostat 13 to interrogate the microcomputer 15 to determine which device has been locked out (FIG. 6; col. 9, lines 56-68). The thermostats of Saunders et al., however, do not control the compressor or other devices.

In contrast to the thermostats of Jayanth et al. and Saunders et al., the thermostat recited in claim 1 operates the compressor "*in response to* at least one signal representative of the operation of the compressor". In one configuration, the thermostat recited in claim 1 responds to signals from a compressor health indicator module. In response to an alert signal indicative of a fault or problem the thermostat can respond in one or more ways, including (1) providing a warning to the user, (2) temporarily or permanently locking out the compressor, and/or retrying the compressor one or more times (specification, paragraph [0029]). Thus the thermostat recited in claim 1 does not simply turn on the compressor when there is a demand for heating or cooling and/or display an error indication, but also can operate the compressor in response to compressor problems. Accordingly, neither Jayanth et al. nor Saunders et al. anticipate the thermostat recited in claim 1. Applicants respectfully submit that claim 1 should be allowed. Claim 2 is dependent on claim 1. Applicants also submit that when

the recitations of claim 2 are considered together with the recitations of claim 1, claim 2 also should be allowed.

Independent claim 3 recites a thermostat that locks out the operation of the compressor in response to an error signal received from an external device. As previously discussed, neither Jayanth et al. nor Saunders et al. disclose a thermostat that locks out the operation of the compressor. Applicants submit that claim 3 should be allowed.

Independent claim 4 is amended to recite a system for controlling the compressor in a climate control system. The system comprises "...a module that generates signals relating to the operation of the compressor, and a thermostat for controlling the compressor responsively to the module." As previously discussed, neither Jayanth et al. nor Saunders et al. disclose a thermostat that controls the compressor responsively to a module that generates signals representative of the operation of the compressor. Applicants therefore submit that claim 4 should be allowed.

Independent claim 5 recites a climate control system comprising "...a module for generating at least one signal based upon the operation of the compressor, and a thermostat for controlling the compressor... in response to signals generated by the module". As previously discussed, neither Jayanth et al. nor Saunders et al. disclose a thermostat that controls the compressor in response to signals representative of the operation of the compressor. Applicants therefore submit that claim 5 should be allowed. Claims 6-13 depend from claim 5. Applicants submit that when considered with the recitations of claim 5, claims 6-13 also should be allowed.

Independent claim 14 is amended to recite a “method of operating a climate control system including a compressor and a thermostat, the method comprising generating a signal based upon the operation of the compressor, and the thermostat controlling the compressor in response to the generated signal.” As previously discussed, neither Jayanth et al. nor Saunders et al. disclose a thermostat that controls the compressor in response to a signal representative of the operation of the compressor. Applicants therefore submit that amended claim 14 should be allowed.

Claims 18-20 (dependent on claim 14) are amended for consistency with amended claim 14. Claims 15-20 depend from claim 14. Applicants submit that when considered with the recitations of claim 14, claims 15-20 also should be allowed.

Independent claim 21 is amended to recite a “method of operating a climate control system including a compressor and a thermostat, the method comprising the thermostat receiving a signal based upon the operation of the compressor, the signal comprising a series of pulses separated by spaces, and the thermostat controlling the compressor in response to the received signal.” As previously discussed, neither Jayanth et al. nor Saunders et al. disclose a thermostat that controls the compressor in response to a signal based on the operation of the compressor. Applicants therefore submit that amended claim 21 should be allowed. Claims 22-23 depend from claim 21. Applicants submit that when considered with the recitations of claim 21, claims 22-23 also should be allowed.

Independent claim 25 is amended to recite a “climate control system comprising: a climate control apparatus for changing the temperature in a controlled space, and a thermostat for operating the climate control apparatus based upon a set point

temperature, a sensed temperature in the controlled space, and a signal sent to the thermostat relating to an operating parameter of the climate control apparatus.” As previously discussed, neither Jayanth et al. nor Saunders et al. disclose a thermostat that uses a signal relating to an operating parameter of the system to control the compressor or other devices of the system. Applicants therefore submit that amended claim 25 should be allowed. Claim 26 depends from claim 25. Applicants submit that when considered with the recitations of claim 25, claim 26 also should be allowed.

Independent claim 27 is amended to recite a “method of operating a climate control apparatus for changing the temperature in a controlled space, the method comprising: receiving, at a thermostat of the climate control apparatus, a signal from the climate control apparatus, and the thermostat operating the climate control apparatus based upon a set temperature, a sensed temperature in the controlled space, and the signal received from the climate control apparatus.” As previously discussed, neither Jayanth et al. nor Saunders et al. disclose a thermostat that uses a signal received from a climate control apparatus to control the compressor or other devices of the system. Applicants therefore submit that amended claim 27 should be allowed.

Independent claim 28 recites a “thermostat for operating a climate control apparatus to control the temperature in the controlled space, the thermostat controlling the climate control apparatus in response to a set temperature for the controlled space, a sensed temperature for the controlled space, and a signal relating to an operating parameter of the climate control apparatus.” As previously discussed, neither Jayanth et al. nor Saunders et al. disclose a thermostat that uses a signal relating to an operating parameter of the system to control the compressor or other devices of the system.

Applicants therefore submit that claim 28 should be allowed. Claims 29-30 depend from claim 28. Applicants submit that when considered with the recitations of claim 28, claims 29-30 also should be allowed.

Therefore, Applicants respectfully request that the rejections of claims 1-10, 13-19, 21, 25, 27, 28 and 30 under 35 U.S.C. § 102 be withdrawn.

REJECTION UNDER 35 U.S.C. § 103

Claims 11 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over either of Jayanth et al. (U.S. Pat. No. 6,758,051) or Saunders et al. (U.S. Pat. No. 4,307,775) in view of Farr (U.S. Pat. No. 5,537,834). This rejection is respectfully traversed. As previously discussed with reference to claim 5 (upon which claim 11 depends) and claim 14 (upon which claim 20 depends), neither Jayanth et al. nor Saunders et al. disclose a thermostat that controls the compressor in response to a signal representative of the operation of the compressor.

Further, it is admitted in the Office Action that neither Jayanth et al. nor Saunders et al. teach restarting the compressor a certain number of times and then locking it out if it does not clear. Farr teaches a manual override by a user of locked-rotor protection circuitry (col. 2, lines 61-67; col. 7, lines 8-19). Farr does not teach a thermostat that restarts the compressor. It would not have been obvious to combine the teachings of Farr with the teachings of Jayanth et al. or Saunders et al. Applicants therefore submit that claims 11 and 20 should be allowed.

Claims 22-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jayanth et al. (U.S. Pat. No. 6,758,051). This rejection is respectfully traversed. As

previously discussed, neither Jayanth et al. nor Saunders et al. disclose a thermostat that controls the compressor in response to a signal representative of the operation of the compressor. Applicants therefore submit that claims 22-24 should be allowed.

Claims 26 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over either Jayanth et al. (U.S. Pat. No. 6,758,051) or Saunders et al. (U.S. Pat. No. 4,307,775). This rejection is respectfully traversed. As previously discussed, neither Jayanth et al. nor Saunders et al. disclose a thermostat that uses a signal relating to an operating parameter of the system to control the compressor or other devices of the system. Applicants therefore submit that claims 26 and 29 should be allowed.

ALLOWABLE SUBJECT MATTER

The Examiner states that claim 12 would be allowable if rewritten in independent form. Accordingly, Applicants have added claim 31 to include the recitations of claims 5 and 12. Therefore, claim 31 should now be in condition for allowance.

NEW CLAIMS

Claims 32 and 33 are added and are supported in the specification. Claim 32 depends from claim 28 and recites that at least one of a fan and valve of the climate control apparatus is configured to send an operating parameter signal directly to the thermostat. New claim 33 depends from claim 4 and recites that the module is one of a plurality of modules for generating signals relating to compressor operation and with

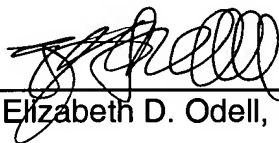
which the thermostat is adapted for use (Figs. 11, 12 and 13; specification, paragraphs [0055]-[0056]). Applicants submit that claims 32 and 33 are in condition for allowance.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7521.

Respectfully submitted,

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